REMARKS

Claims 1-31 are all the claims presently pending in the application.

Claims 1, 11, 12, and 14-18, and 21 are independent.

Independent claim 1 is amended merely to make a minor editorial correction, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicants specifically state that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-31 stand rejected under 35 U.S.C. § 103(a) over Parulski et al. (U.S. Patent No. 6,573,927) and Ito, et al. (U.S. Patent No. 6,453,071; hereinafter "Ito").

This rejection is respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

The claimed invention is directed to a print designating method and apparatus, and a printing method and apparatus, which may be applied to a digital camera.

In an illustrative, non-limiting embodiment of the present invention as defined by claim 1, a print designating method includes storing, in a print designation file in a recording medium in which a file including image data is stored, print designating information to designate an image to be printed stored in the recording medium. The print designating information includes file specifying information for specifying a subject file including the image to be printed and file type identifying information for identifying whether the subject file includes a moving image file or a still image file. If the subject file includes a moving

image file, the print designating information further includes scene specifying information for specifying a subject scene to be printed in the moving image file.

Other exemplary embodiments of the present invention as defined by independent claims 11, 12, and 14-17 also recite similar features.

In another exemplary embodiment of the present invention as defined by claim 18, a print designating device includes means for obtaining and recording image data, which encodes and stores the image data in a recording medium and means for storing, in a print designation file in the recording medium in which the file including image data is stored, print designating information to designate an image to be printed which is stored in the recording medium without duplicating the image data of the image to be printed.

In another exemplary embodiment of the present invention as defined by claim 21, a print designating method includes storing print designation information in a print designation file in a recording medium to designate an image to be printed, wherein the recording medium includes a file including image data of the image to be printed, and wherein the print designation information designates the image to be printed without duplicating the image data of the image to be printed.

In conventional devices, the image data of a still image taken from a moving image is stored redundantly on the recording medium with the image data of the moving image, thereby wasting memory capacity of the recording medium on which the image data is stored.

In the claimed invention, on the other hand, the designation of printing from the still image file and the moving image file can be achieved using a single print designation file (e.g., without duplicating the image data of the image to be printed).

That is, by taking out the desired still image scene from the moving image file, the memory capacity of the memory card can be used efficiently since a duplicate still image data does not have to be prepared. Thus, the claimed invention provides a method and device for printing a specific scene of a moving image without redundantly storing (i.e., duplicating), on the recording medium, the image data of the image to be printed, thereby avoiding wasting of the memory capacity of the recording medium (e.g., see Figure 2, page 3, lines 17-23, and page 21, lines 18-22).

II. THE PRIOR ART REJECTIONS

Claims 1-31 stand rejected under 35 U.S.C. § 103(a) as being obvious over Parulski and Ito.

First, Applicants respectfully submit that the Examiner's stated motivation for combining the references clearly would not lead the ordinarily skilled artisan to arrive at the claimed invention.

For example, the Examiner alleges that it would have been obvious to combine Parulski and Ito to allow operators/users to select a desired frame/still image form a moving image file to be printed.

However, Applicants submit that both Parulski and Ito already disclose apparatus and methods that simply select a still image from a moving image using operations performed on devices such as cameras and PCs.

The claimed invention, on the other hand, has an additional advantage of avoiding wasting of the memory capacity of the recording medium (e.g., see Figure 2, page 3, lines 17-

23, and page 21, lines 18-22), which is not mentioned or even contemplated by either Parulski or Ito.

That is, in the claimed invention, by taking out the desired still image scene from the moving image file, the memory capacity of the memory card can be used efficiently since a duplicate still image data does not have to be prepared.

Thus, the claimed invention provides a method and device for printing a specific scene of a moving image without redundantly storing (i.e., duplicating), on the recording medium, the image data of the image to be printed, thereby avoiding wasting of the memory capacity of the recording medium (e.g., see Figure 2, page 3, lines 17-23, and page 21, lines 18-22).

For the foregoing reasons, Applicants respectfully submit that the Examiner's stated motivation is deficient in establishing a reasonable motivation for arriving at the claimed invention (i.e., that which the inventor has done).

Second, even assuming *arguendo* that it would have been obvious to combine Parulski and Ito, Applicants respectfully submit that there are elements of the claimed invention which clearly are not disclosed or suggested by Parulski or Ito, either alone or in combination, and therefore, respectfully traverse this rejection.

The Examiner acknowledges that Parulski does not explicitly disclose that, if the subject file comprises a moving image file, the print designating information further includes scene specifying information for specifying a subject scene to be printed in the moving image file.

However, the Examiner asserts that Ito makes up for the deficiencies of Parulski by allegedly disclosing print designating information that includes scene specifying information

for specifying a subject scene to be printed in the moving image file (e.g., selecting and extracting a specific scene from a moving file to be printed, as disclosed by Ito at Figures 23-29; column 20, lines 35-42; and column 25, lines 50-67 to column 26, lines 1-60).

Applicants respectfully disagree with the Examiner's position for several reasons.

For example, independent claim 1 recites, *inter alia*, a print designating method, including:

> storing, in a print designation file in a recording medium in which a file including image data is stored, print designating information to designate an image to be printed which is stored in the recording medium,
> wherein the print designating information includes:
> file specifying information for specifying a subject file including the image to be printed; and
> file type identifying information for identifying whether the subject file comprises a moving image file or a still image file, and
> wherein if the subject file comprises the moving image file, the print designating information further includes scene specifying information for specifying a subject scene to be printed in the moving image file (emphasis added).

According to the claimed invention, because the print designating information includes scene specifying information for specifying a subject scene (e.g., a still image) to be printed in the moving image file, it is possible to designate the printing of either the still image file or the moving image file using a single print designation file without duplicating the image data of the image to be printed.

That is, by taking out the desired still image scene from the moving image file, the memory capacity of the memory card can be used efficiently since a duplicate still image data does not have to be prepared.

Thus, the claimed invention provides a method and device for printing a specific scene of a moving image without redundantly storing (i.e., duplicating), on the recording medium, the image data of the image to be printed, thereby avoiding wasting of the memory capacity of the recording medium (e.g., see Figure 2, page 3, lines 17-23, and page 21, lines 18-22).

In comparison, Parulski merely discloses an electronic still camera for capturing still images and storing the images on a recording medium. The still camera includes a user interface for displaying and scrolling through a plurality of still images stored on the memory card, and for selecting particular still images to be printed. The camera has a processor that stores a print utilization file on the removable memory card separate from the still image files (e.g., see Parulski at column 3, lines 25-62; see also column 9, lines 25-51).

However, as the Examiner acknowledges, Parulski does not explicitly disclose that, if the subject file comprises a moving image file, the print designating information further includes scene specifying information for specifying a subject scene to be printed in the moving image file. Indeed, Parulski does not contemplate saving memory capacity on the storage medium (e.g., a memory card) such that a still image can be printed from a moving image stored on the storage medium (e.g., a memory card).

Similarly, Ito also does not disclose or suggest saving memory capacity on the storage medium (e.g., a memory card) such that a still image can be printed from a moving image stored on the storage medium (e.g., a memory card).

In fact, Applicants respectfully submit that "*selecting and extracting a specific scene from a moving file to be printed*", as allegedly taught by Ito, clearly is different than disclosing print designating information that includes scene specifying information for

specifying a subject scene to be printed in the moving image file, according to the claimed invention.

Thus, Applicants submit that Ito clearly does not make up for the deficiencies of Parulski. That is, contrary to the Examiner's position, Applicants respectfully submit that Ito does not disclose or suggest this feature of the claimed invention, and therefore, even assuming *arguendo* that it would have been obvious to combine these references, Ito would not have made up for the deficiencies of Parulski.

For example, in contrast to Parulski, Ito relates to data communication techniques using communication control buses capable of dealing with mixed control and data signals (e.g., see Ito at column 1, lines 8-14).

Particularly, Ito discloses data communication techniques for improving communication efficiency and reducing a capacity of a memory used for communications (e.g., see Ito at column 2, lines 44-50). That is, Ito discloses reducing the amount of still image data and moving image data being transferred between apparatuses by using various compression encoding techniques, such as JPEG and MPEG (e.g., see Ito at column 1, lines 30-37).

For example, Ito discloses using a communication scheme that is isochronous with a predetermined communication cycle for transmitting moving images and a communication scheme that is isochronous or asynchronous with the communication cycle for transmitting still images (e.g., see Ito at column 3, line 65, to column 4, line 5). Thus, Ito is concerned with the communication scheme between the camera and a PC.

As mentioned above, the Examiner alleges that Ito discloses print designating information that includes scene specifying information for specifying a subject scene to be printed in the moving image file (e.g., selecting and extracting a specific scene from a moving file to be printed).

However, contrary to the Examiner's position, Applicants respectfully submit that Ito does not disclose or suggest print designating information that includes scene specifying information for specifying a subject scene to be printed in the moving image file, as claimed.

Instead, Ito merely discloses a recording/reproducing device (e.g., a camera 201) that is used to select moving images stored in the recording medium 19 in order to print or display the moving images on a display of the device (e.g., the camera 201). The recording or reproducing device (e.g., the camera 201) reads the selected moving image, and then, the user instructs the recording reproducing device to transmit the desired moving image (e.g., see Ito at column 20, lines 36-42).

Contrary to the claimed invention, Ito merely discloses that the camera can be used to select still images from the moving images and transmit both the moving images and the still images (i.e., the moving images and the still images are stored separately), not that print designating information is used to specify a subject scene to be printed in the moving image file, as claimed.

In fact, in the second embodiment of Ito, which is relied upon by the Examiner, Ito discloses that the still image to be transmitted is non-compression encoded (e.g., see Ito at column 25, lines 20-25), while the moving image to be transmitted is compression encoded

(e.g., see Ito at column 25, lines 26-31). Thus, the still image and moving images clearly must be stored separately before being transmitted separately.

Indeed, Ito specifically discloses that, in the "reproduce mode", the moving image data is selected by the recording/reproducing unit 8 from the recording medium 19. The compression encoded moving image data is then reproduced from the recording medium 19 to the memory 15, while at the same time, the compression/expansion unit 7 expands the moving image data from the recording medium and stores the expanded copy of the moving image data in the memory 13 in a unit of several frames.

In other words, Ito clearly discloses that the image data in the moving image data is duplicated or reproduced to produce the still image data, and indeed, is stored in two separate memory units 13 and 15.

Moreover, Figure 24 of Ito specifically shows two channels (i.e., channel **a** and channel **b**), each of which is used to transfer either the moving images or the still images, respectively, to the PC (e.g., see Ito at column 25, line 66, to column 26, line 3). That is, channel **a** is used to transfer the moving image data, while channel **b** is used to transfer the still image data.

The user can then view both the moving image and the still image on the monitor of the PC to confirm the still image to be printed (e.g., see column 26, lines 34-60).

In other words, Ito clearly discloses that the image data in the moving image data is duplicated or reproduced to produce the still image data, and indeed, is transferred separately.

For the foregoing reasons, Applicants respectfully submit that Ito clearly does not disclose or suggest "storing, in a print designation file in a recording medium in which a file

including image data is stored, print designating information to designate an image to be printed which is stored in the recording medium, ...wherein if the subject file comprises the moving image file, the print designating information further includes scene specifying information for specifying a subject scene to be printed in the moving image file, as claimed in independent claim 1 (emphasis added).

That is, any combination of Parulski and Ito clearly would not teach or suggest taking out the desired still image scene from the moving image file, such that the memory capacity of the memory card can be used efficiently (e.g., a duplicate still image data does not have to be prepared).

On the contrary, Parulski simply relates to a camera using still images. On the other hand, Ito specifically discloses reproducing the still image data from the moving image data and transmitting the moving image data and the still image data separately to provide advantages related to the communication between the camera and the PC.

In fact, Parulski and Ito are not even concerned with avoiding wasting of the memory capacity of the recording medium. In fact, Ito specifically discloses additional memory units 13 and 15 in which the image data which is stored in the recording medium 19 is reproduced/duplicated (e.g., see Figure 22), which clearly is contrary to (i.e., teaches away from) the claimed invention.

Thus, Applicants submit that Ito clearly does not make up for the deficiencies of Parulski, and therefore, even assuming *arguendo* that it would have been obvious to combine these references, any combination of Parulski and Ito would not arrive at the claimed invention.

For the foregoing reasons, Applicants submit that Parulski and Ito clearly would not have disclosed or suggested all of the features of independent claim 1, and therefore, the rejection of this claim should be withdrawn.

Other exemplary embodiments of the present invention, as defined by independent claims 11, 12, and 14-18, and 21, recite somewhat similar features, and therefore, also should be patentable over the cited references for somewhat similar reasons, as well as for the features recited therein.

For example, independent claim 18 recites, *inter alia*, a print designating device including:

> means for obtaining and recording image data, which encodes and stores the image data in a recording medium; and
> means for storing, in a print designation file in the recording medium in which the file including image data is stored, print designating information to designate an image to be printed which is stored in the recording medium without duplicating the image data of the image to be printed (emphasis added).

Applicants submit that Parulski and Ito, either alone or in combination, do not disclose or suggest any structure, equivalents thereof, or identity of function necessary for the claimed "means for storing", as recited in independent claim 18, nor has the Office Action established that such is the case.

Thus, Applicants submit that Parulski and Ito clearly would not have disclosed or suggested all of the features of independent claim 18, and therefore, the rejection of this claim should be withdrawn.

On the other hand, independent claim 21 recites, *inter alia*, a print designating method, including:

> storing print designation information in a print designation file in a recording medium to designate an image to be printed,
> wherein said recording medium comprises a file including image data of the image to be printed, and
> wherein said print designation information designates the image to be printed without duplicating said image data of the image to be printed (emphasis added).

Applicants submits that Parulski and Ito, either alone or in combination, do not disclose or suggest that "said print designation information designates the image to be printed without duplicating said image data of the image to be printed", as recited in independent claim 21, nor has the Office Action established that such is the case.

Thus, Applicants submit that Parulski and Ito clearly would not have disclosed or suggested all of the features of independent claim 21, and therefore, the rejection of this claim should be withdrawn.

For the foregoing reasons, Applicants respectfully submit that the prior art of record fails to disclose storing a print designation file in a recording medium in which a file including image data is stored that designates a still image to be printed which is stored in a moving image file stored in the recording medium, as claimed in independent claims 1, 11, 12, and 14-18, and 21, or for that matter even contemplate (or teach or suggest) reducing the wasting of memory capacity in the storage medium, according to one of the exemplary aspects of the claimed invention.

Moreover, dependent claims 2-10, 13, 19, 20, and 22-31 also are patentable over Parulski and Ito, either alone or in combination, by virtue of their respective dependencies, as well as for the additional features recited therein.

For at least the foregoing reasons, Applicants respectfully submit that it would not have been obvious to a person of ordinary skill in the art at the time of the invention to combine the prior art of record to arrive at the claimed invention, nor would any combination of the references arrive at the claimed invention.

Thus, Applicants respectfully request that the Examiner withdraw the rejection of claims 1-31 and permit these claims to pass to immediate allowance.

III. FORMAL MATTERS AND CONCLUSION

Applicants reiterate the request that the Examiner acknowledge Applicants' claim to foreign priority and receipt of the priority documents filed on May 19, 2000.

In view of the foregoing, Applicants submit that claims 1-31, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

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